

**Recommendation #251
Accelerate the TRU Waste Disposition Program**

Background

The Savannah River Site (SRS) has two principal types of legacy Transuranic (TRU) waste, debris waste (job control waste) contaminated with Pu-238 and debris waste contaminated with Pu-239. The TRU waste can also be divided into waste that is stored in 55-gallon drums and waste that is stored in large boxes. As of October 2007, only 6,000 drums of TRU waste remain at SRS. This is an inventory reduction of TRU waste of over 25,600 drums. Out of the total legacy drummed TRU waste, TRU Pad 1 contains approximately 900 drums of high activity TRU waste (principally Pu-238). In addition, approximately 4,000 cubic meters in non-drummed containers (including 35 large boxes containing 1,500 cubic meters) remain on site. Approximately 2,000 cubic meters of waste or (55 large boxes) have been repackaged but await certification and TRUPACT III licensing before they can be sent to Waste Isolation Pilot Plant (WIPP).

SRS has begun to deploy Non-Destructive Assay (NDA) and Non-Destructive Examination (NDE) systems as part of the process to ship the remaining large box waste (non-drummed waste). However, the NDA and NDE systems still need to be certified by the State of New Mexico (New Mexico Environmental Department or NMED). Even after certification, shipment of such waste cannot occur until the Nuclear Regulatory Commission (NRC) licensing of the TRUPACT-III shipping container is received. The license application was submitted in July 2007. Assuming all goes well with the certification by New Mexico of the NDA/NDE systems and NRC licensing of the TRUPACT III container, SRS could begin shipments of the repackaged large boxes containing TRU wastes as early as FY 2008. SRS has repackaged six large boxes this past fiscal year and has an existing inventory (referenced above) ready for shipment.

In an effort to begin the process to get the high activity (principally Pu-238) drummed waste ready for shipment, SRS and South Carolina Department of Environmental Control (SCDHEC) have agreed to try to repackage and ship as much of Pad 1 TRU waste to WIPP as possible. SRS submitted the necessary Resource Conservation and Recovery Act (RCRA) Part B Permit modifications to SCDHEC in June 2007 supporting the SRS and SCDHEC agreement.

However, the President's FY 2008 budget supports limited drummed and large boxed TRU waste activities and WIPP shipments. Further, the FY 2009 Department of Energy (DOE) site target funding will require curtailment of the site's legacy TRU waste disposition (Ref. 1).

Comment

The current SRS TRU waste program has been accelerated almost 20 years from the first projected plan. Under the accelerated schedule, the SRS Citizens Advisory Board (CAB) and local stakeholders have been told in the past that all legacy TRU waste is projected to be shipped off SRS by FY 2013 (Ref. 2).

The SRS CAB is extremely pleased with the acceleration to date of the legacy TRU waste program at SRS. However, we are concerned that the future funding limitations may extend the TRU waste disposition program past FY 2013. As stated in our most recent recommendation, the SRS CAB would like to see an actual decrease in the high activity TRU wastes inventory begin as soon as possible (Ref. 3).

With the recommendation from the regulators to ship as much of Pad 1 TRU waste to WIPP as possible, funding and a firm commitment from DOE appear to be the major obstacles to accomplish the legacy TRU waste removal by FY 2013. DOE's track record for meeting commitments is mixed and in many cases stakeholders' expectations have not been met. The SRS CAB believes this is one program where closure can be achieved in the relatively near term. Many stakeholders would view such an accomplishment as a major success in removing legacy waste out of South Carolina. It would also significantly reduce legacy costs and continue with the extraordinary acceleration that has already occurred in disposition of the SRS legacy TRU wastes.

Recommendation

The SRS CAB recommends that DOE-SR:

1. Commit in writing to the SRS CAB and SCDHEC that all legacy TRU waste will be removed from SRS by FY 2013.
2. Increase the SRS target funding for FY 2009 to a level that continues to accelerate the legacy TRU waste disposition activities and ensure that future funding requests are adequate to complete the removal of all legacy TRU waste no later than FY 2013.

References

1. TRU Waste Program Update, presentation to the Waste Management Committee by Bert Crapse – DOE-SR, October 23, 2007.
2. TRU Waste Program Update, presentation to the Waste Management Committee by Bert Crapse – DOE-SR and Sonny Goldston - WSRC, October 24, 2006.
3. Citizens Advisory Board Recommendation No. 241 (adopted November 17, 2006), "Progress of PUREX and TRU Waste Disposition".